

REMARKS

Applicants appreciate the detailed examination evidenced by the Final Official Action mailed January 23, 2007 ("the Final Official Action"). Applicants also appreciate the continued allowance of Claims 19 and 20 and the indication that Claims 2-5 include patentable subject matter. Final Official Action, page 1.

In response, Applicants maintain the patentability of the rejected claims over Teo and, respectfully, request entry of the present amendment after final as no new issues have been raised, and alternatively, the present amendment narrows the issues for Appeal. In particular, the amendments to Claim 1 have simply incorporated the recitations of original dependent claim 13, which has previously been examined. Applicants respectfully submit that the pending claims are patentable for at least the reasons described herein.

Amended Claim 1 is Patentable Over Teo

Claims 1, 6, 11, 12, 13, 16, and 17 stand rejected under 35 U.S.C. section 102 over U.S. Patent No. 5,970,374 to Teo. *Official action, page 3*. In response, Applicants have amended independent Claim 1 to recite in part:

forming a conductive layer on the portion of the barrier layer inside the intaglio pattern and on the upper surface wherein the conductive layer comes in contact with the barrier layer and the upper surface, wherein the conductive layer comprises aluminum,

which is not disclosed or suggested by Teo. For example, in some embodiments according to the invention, as shown in Figure 5, the conductive layer 117 (*i.e.*, aluminum) is formed "on the upper surface...in contact with the barrier layer and the upper surface". Accordingly, as illustrated by the embodiments shown in Figure 5, the aluminum layer 117 comes directly into contact with the oxide layer included in the mold layer 107, which contrary to the assertions in the Final Official Action, is not disclosed or suggested by Teo.

The Final Official Action alleges that the aluminum layer discussed in Teo at col. 6, lines 45 – 50, discloses the claimed conductive aluminum layer that is in contact with the upper surface. However, the cited passage of Teo (in referring to Figure 4D thereof) shows that the aluminum alloy used to fill the via is formed on layer 69 which is not an

In re: Jong-myeong Lee et al.
Serial No.: 10/813,330
Filed: March 30, 2004
Page 8 of 8

oxide. Therefore, the layer in Teo does not come into contact with the first surface of the oxide layer included in the mold layer. Accordingly, amended independent Claim 1 is patentable for at least the reasons described above. Furthermore, the rejected dependent claims are patentable for at least the same reasons described above in reference to independent Claim 1.

As discussed above, the present amendment of Claim 1 incorporating the recitations of dependent Claim 13 does not raise a new issue and, moreover, narrows the issues for appeal. Accordingly, Applicants respectfully request entry of the present amendment and the allowance of all the claims in due course. If any informal matters arise, the Examiner is encouraged to contact the undersigned by telephone at (919) 854-1400.

Respectfully submitted,


Robert N. Crouse
Registration No. 44,635

USPTO Customer No. 20792
Myers Bigel Sibley & Sajovec
Post Office Box 37428
Raleigh, North Carolina 27627
Telephone: 919/854-1400
Facsimile: 919/854-1401

CERTIFICATE OF EXPRESS MAILING UNDER 1.10

"Express Mail" mailing label number: EV 887528550 US
Date of Deposit: March 15, 2007

I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. §1.10 on the date indicated above and is addressed to Mail Stop PCT, Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450.


Sheena Donnelly